

CLAIMS

We claim:

1 1. (Cancelled)

1 2. (Currently amended) ~~The method of claim 1 wherein~~ A method of texture filtering,
2 comprising:
3 receiving input information relating to polygon and texture data, where the input
4 information relates to a rate of sampling of the polygon data; and
5 morphing a texture reconstruction filter characteristic based upon the input
6 information so that after subsamples are aggregated, an effective filter characteristic
7 matches the texture reconstruction filter characteristic of a texture reconstruction filter used
8 for coarse sampling.

1 3. (Currently amended) The method of claim ~~1~~ 2 wherein the input information relates
2 to a degree of warping per texture coordinate.

1 4. (Currently amended) The method of claim ~~1~~ 2 wherein the effective filter
2 characteristic matches the characteristic of a bilinear filter.

1 5. (Currently amended) The method of claim ~~1~~ 2 wherein the effective filter
2 characteristic matches the characteristic of a combination of a bilinear filter and a box filter.

1 6. (Currently amended) The method of claim ~~1~~ 2 wherein the effective filter
2 characteristic matches the characteristic of a combination of a linear filter between MIP
3 levels and a combination of a bilinear filter and a box filter.

1 7. (Currently amended) The method of claim ~~1~~ 2 wherein the morphing of the texture
2 reconstruction filter characteristic is performed in a continuous manner.

1 8. (Currently amended) The method of claim ~~1~~ 2 wherein the morphing of the texture
2 reconstruction filter characteristic is determined by a value $\beta = \min (\delta * (n-1)/n, 1.0)$
3 wherein δ is a degree of warping per texture coordinate and n is a sampling rate of the
4 polygon data.

1 9. (Cancelled)

1 10. (Currently amended) ~~The electronically-readable medium of claim 9 wherein~~ An
2 electronically-readable medium having embodied thereon a program, the program being
3 executable by a machine to perform a method for texture filtering, the method comprising:
4 receiving input information relating to polygon data and texture data, where the input
5 information relates to a rate of sampling of the polygon data; and
6 morphing a texture reconstruction filter characteristic based upon the input
7 information so that after subsamples are aggregated, an effective filter characteristic
8 matches the texture reconstruction filter characteristic of a texture reconstruction filter used
9 for coarse sampling.

1 11. (Currently amended) The electronically-readable medium of claim ~~9~~ 10 wherein the
2 input information relates to a degree of warping per texture coordinate.

1 12. (Currently amended) The electronically-readable medium of claim ~~9~~ 10 wherein
2 the morphing of the texture reconstruction filter characteristic is performed in a continuous
3 manner.

1 13. (Original) An apparatus for texture filtering, comprising:
2 a first module adapted to detect a sampling rate n of polygon data;
3 a second module coupled to the first module adapted to select a filtering mode
4 based upon a sampling rate n of polygon data and a degree of warping δ per texture
5 coordinate; and
6 a third module coupled to the second module adapted to compute texel blending
7 factors based on the filtering mode determined by the second module.

1 14. (Original) The apparatus of claim 13 wherein the second module selects a filtering
2 mode based upon a value $\beta = \min (\delta * (n-1)/n, 1.0)$.

1 15. (Original) The apparatus of claim 13 further comprising a fourth module coupled to
2 the third module adapted to detect a degree of warping δ per texture coordinate.

1 16. (Original) An apparatus for texture filtering comprising:
2 a filter select module adapted to select a filtering mode based upon a sampling rate
3 n of polygon data; and
4 a texel blending module coupled to the filter select module adapted to compute
5 texel blending factors based on the filtering mode determined by the filter select module.

1 17. (Original) The apparatus of claim 16 wherein the filter select module determines a
2 filter characteristic of a selected filtering mode based upon the sampling rate n and a
3 degree of warping δ per texture coordinate.

1 18. (Original) The apparatus of claim 16 wherein the filter select module selects the
2 filtering mode based upon a value $\beta = \min (\delta * (n-1)/n, 1.0)$.

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1 19. (Currently amended) An apparatus for texture filtering, comprising:
2 means for receiving input information relating to polygon data and texture data,
3 where the input information relates to a rate of sampling of the polygon data; and
4 means for morphing a texture reconstruction filter characteristic based upon the
5 input information so that after subsamples are aggregated, an effective filter characteristic
6 matches the texture reconstruction filter characteristic of a texture reconstruction filter used
7 for coarse sampling.

1 20. (New) The apparatus of claim 19 wherein the input information relates to a degree
2 of warping per texture coordinate.

1 21. (New) The apparatus of claim 19 wherein the morphing of the texture
2 reconstruction filter characteristic is performed in a continuous manner.

1 22. (New) A method of texture filtering, comprising:
2 receiving input information relating to polygon and texture data, where the input
3 information relates to a degree of warping per texture coordinate; and
4 morphing a texture reconstruction filter characteristic based upon the input
5 information so that after subsamples are aggregated, an effective filter characteristic
6 matches the texture reconstruction filter characteristic of a texture reconstruction filter used
7 for coarse sampling.